Statement of Work

For

Serbia Multiple Integrated Laser Engagement System (MILES)

Training Systems



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1. SCOPE

This Statement of Work (SOW) defines the effort required for developing, integrating, testing, managing, documenting, and delivering the Serbia Multiple Integrated Laser Engagement System (MILES) Training Systems.

2. APPLICABLE DOCUMENTS

The following documents of issue shown on the document summary list form part of this SOW to the extent specified herein. In the event of a conflict between documents referenced herein and the contents of this SOW, the contents of the SOW shall be the governing requirement.

2.1 Government Documents, Drawings, and Publications

The following government documents, drawings, and publications form part of this document to the extent specified herein.

PRF-PT-00434B Performance Specification for the MILES IWS PRF-PT-00516 ver 1.2 Performance Specification for the IMILES TVS

2.2 Availability of Government Documents, Drawings, and Publications

Copies of these documents are available from PEO STRI, SFAE-STRI-KOL, 12350 Research Parkway, Orlando, FL 32826

3 REQUIREMENTS

3.1 Program Management

You shall provide the overall management and administrative effort necessary to ensure that the requirements of this contract are accomplished.

3.1.1 Integrated Master Plan (IMP)

You shall implement, manage, update, and maintain the contract IMP. You shall produce and integrate the system in accordance with the IMP. The IMP shall be used throughout the contract as a management tool to assess progress in achieving program requirements.

3.1.2 Integrated Master Schedule (IMS)

You shall develop, implement, manage, update, and maintain the contract IMS. All contract schedule information delivered or presented at program reviews shall originate from the IMS, shall be traceable to the IMP, and shall contain all critical events and exit criteria, accomplishments, predecessors and successor events, and their dependencies. The IMS shall

address total program activities including activities performed by major subcontractors. (DI-MISC-81650, CDRL A001, Integrated Master Schedule (IMS)

3.1.3 Configuration Management

You shall use an automated internal configuration management process to monitor, update, and control all configuration documentation, physical media, and physical parts representing or comprising the system configuration items (CIs). The configuration management process must handle all levels of product and process integration to build and support the product as well as manage the sequence of significant events.

3.1.4 Risk Management

You shall prepare, implement, and maintain a risk management process that includes identification, analysis, mitigation planning, mitigation plan implementation, and tracking. Your risk management process shall measure future uncertainties in achieving program goals within defined cost, schedule, and performance constraints.

3.1.5 Management Reviews

3.1.5.1 Post Award Conference

You shall conduct a post award conference at your facility on a mutually agreed to date after the contract is awarded. The conference shall introduce the key IPT participants, identify points of contact and discuss both parties understanding of the scope of work and other contract issues, and shall include a discussion of the IMP, IMS, CM Process, and Risk Managerment.

3.1.5.2 In-Progress Review (IPR)

You shall conduct informal IPRs on an average of one every three (3) to four (4) months in accordance with the Integrated Master Schedule. The location of the reviews shall be at your facility unless otherwise mutually agreed to. The IPRs shall provide a program overview and a detailed discussion of program status and schedules, and production/integration issues. You shall coordinate and obtain government concurrence of the selected IPR topics at least two (2) weeks prior to the IPR. Status and information at the review shall reflect currency since the previous review.

3.2 Systems Engineering

You shall implement a system engineering process that will transform all system requirements into a set of lower level performance requirements that define the system.

3.2.1 Hardware Engineering

You shall integrate and assemble the system hardware that satisfies the performance requirements stated in the system specifications.

3.2.1.1 Hardware

You shall produce, integrate, test, and deliver MILES Individual Weapon Systems (IWS) and vehicle systems (TVS) hardware in accordance with PRF-PT-00434B, and PRF-PT-00516 version 1.2. You shall apply the system engineering process during each level of system integration. You shall perform all activities, including in-country form/fit, as required to integrate and assemble the hardware/software required to achieve a fully functional and operates in accordance with the system performance specification and Serbia weapons and vehicle configurations.

3.2.2 Reliability Engineering

You shall manage a system reliability process satisfying all reliability objectives. This reliability process shall be completely integrated within the system's engineering process.

3.2.3 Safety Engineering

You shall ensure the safety of the system's design, operation, transportation, maintenance, support, and disposal. A hazardous risk index including hazardous severity and hazardous probability levels shall be developed for all hazards. You shall integrate existing Army approved Safety Assessment Reports and Safety Release into system procurements whenever possible. (DI-SAFT-80102B, CDRL B001, Safety Assessment Report (SAR)

3.2.4 Producibility Engineering

You shall perform producibility engineering tasks during production to ensure a smooth, timely, and cost effective production.

You shall plan the overall manufacturing approach to assure a stabilized manufacturing process designed to: ensure high quality; minimize scrap, rework and repairs; minimize lead and cycle times; and minimize use of strategic, critical, and hazardous materials. You shall maintain a stabilized, efficient production program with emphasis on constant surveillance of the manufacturing process, identifying deficiencies and implementing corrective actions and improvements to assure a high quality end item at the lowest possible cost.

3.2.4.1 Site Survey and Form/Fit

You shall conduct one trip for site survey to determine the best installation locations for mounting of the SATs brackets on the host weapons, and one trip for the Form/Fit to validate the mounting of production SATs brackets on the host weapons, and make sure these laser's SATs are working with the flash and bang from blank fire. A day-by-day agenda and schedule of events, as well as personnel. Military Equipment and support equipment requirements shall be coordinated with the Government NLT 30 days prior to the start of the Site Survey/Form-Fit.

3.2.5 Quality Engineering

You shall establish measurement points that will provide maximum visibility into new and prior processes to assure contractual requirements are being met. You shall establish a suspense system to ensure timeliness of analysis and corrective action for discrepancies and risk reduction items. All discrepancy correction shall be documented and entered in an integrated database and presented during scheduled IPRs.

3.3 Testing and Evaluation Program

You shall perform production and integration system test and evaluation to verify that the hardware meets the performance requirements defined in PRF-PT-00434B, and PRF-PT-00516 version 1.2. Compliance inspections and verification tests shall be conducted utilizing established in-process production and factory existing standard US Army contractor's test procedures and plans.

3.3.1 Test Readiness Review (TRR)

You shall conduct a TRR prior to the start of the in-plant 100% functional test. This TRR shall assess test objectives, test methods and procedures, scope of tests, and determines if required test resources have been properly identified and coordinated to support planned tests. The Government will participate in the TRR.

3.3.2 In-Plant Inspection and Test

You shall conduct a 100% inspection and functional/operational test of all MILES hardware and software being delivered under this contract. You shall utilize the existing approved test procedures. The Government will witness this in-plant test. You shall maintain a log of all subsystem and system tests conducted in-plant. The log shall contain information, by date, as to equipment activated, maintenance performed including adjustments, alignments, equipment failures, and replacements. (DI-NDTI-80603, Test Procedure)

3.3.3 On-Site Inspection, Installation, Integration, and Final Acceptance Test

You shall plan, coordinate, and support on-site system inspection, installation, integration and acceptance test prior to the start of NET. You shall identify any damages to the hardware after arrival at the host country location and perform an operational verification that the hardware

continues to operate properly. You shall ensure that the installed system meets all of the performance requirements of the MILES training systems without degradation of performance. You shall perform on-site acceptance test IAW agreed upon contractor's format test procedures and checklist. This acceptance test shall be a stand-alone test and shall not be combined in any way with the NET demonstration.

3.4 Logistics Support

3.4.1 Technical Data Package (TDP)

You shall maintain a TDP that accurately and completely depicts the equipment being fielded. For elements of this program procured with Government funding and for modifications to commercial and non-developmental program elements you shall develop, produce, and maintain a production level TDP IAW MIL-STD-31000 that provides design, engineering, manufacturing and quality assurance requirements information sufficient to procure or manufacture an interchangeable item that duplicated the physical and performance characteristics of the original product, without additional design engineering effort or recourse to the original design activity. For existing commercial and non-developmental program elements you shall develop, produce, and maintain commercial documentation IAW MIL-STD-31000 containing the engineering, and manufacturing information necessary to assemble, integrate and verify performance. You shall utilize existing commercial drawings, documentation and specifications where possible. You shall verify, validate, and maintain a TDP that includes all required documents, drawings, and information required to support and maintain the Serbia MILES Training System. The TDP will include, at a minimum, the following:

- 1. Logistics Product Data consisting of:
 - a. Provisioning Parts List
 - b. Recommended Initial Spares/Repair Parts List
 - c. Tools and Test Equipment List
 - d. Common and Bulk items List

(DI-SESS-81758) (See Annex to Exhibit A, Logistics Product Data)

2. Logistics Product Data Summaries

(DI-SESS-81759) (See Annex to Exhibit A, Logistics Product Data Summaries)

The TDP shall be verified, kept current, and shall be available to the Government for review at any time.

3.4.2 Supportability Analysis and Logistics Management Information

You shall conduct repair level analyses, develop diagnostic, preventative maintenance and repair procedures, conduct facilities analyses, refine hardware and software maintenance and support concepts, and identify support resource requirements including required spares and support equipment. Using Source Maintenance and Recoverability (SM&R) Codes, you shall develop a

listing of which items should be repaired and which should be discarded and the level of maintenance at which the repair should be performed with the associated cost. You shall document the following in a database:

- a. All input data and their corresponding value and source of the data.
- b. Operational scenario modeled, assumptions made, constraints assumed, and non-economic factors imposed.
- c. Maintenance alternatives considered.
- d. Analytical method and models used to perform the economic evaluations.
- e. Discussion of the sensitivity evaluation performed and results obtained.

(DI-SESS-81758 Logistics Product Data (See Annex to Exhibit A, Logistics Product Data)

DI-SESS-81759 Logistics Product Data Summaries (See Annex to Exhibit A) Logistics Product Data Summaries

3.4.3 Initial Spares and Repair Parts

You shall field initial spares and repair parts for any new or improved capability based on Level of Repair Analysis and Logistics Support Analysis. You shall recommend the range and quantity of initial spare and repair parts needed to initially support the Serbia MILES Training System. The recommendations shall include consideration for the support concept of the system, Operations and Maintenance (O&M) funding availability, essentiality of the component, price, long lead times, and failure factors. You shall combine procurement/production of selected spares with identical items procured/produced for installation on the primary equipment when ordered by the Government. You shall prepare data to verify that pricing is uniform and consistent. Configuration control shall be maintained for on-order spares as well as for items to be installed on the primary system.

3.4.4 Special Tools and Test Equipment (ST&TE)

You shall identify all tools and test equipment required for the installation, checkout, diagnosis, repair and use of the system. This shall include any and all items required to inspect, test, calibrate, service, repair, or overhaul the system or its constituent components. You shall identify any deficiencies between the tools and test equipment required for support of the system and those available at the intended fielding sites.

3.4.5 Common and Bulk Items

You shall identify all items required to operate and support the system for which there is a recurring demand. This includes items such as gels, fluids, filters, ink cartridges, batteries, and other consumable/disposable items. You shall provide sufficient quantities of these items at fielding to support the initial period or service.

3.4.6 Packaging, Handling, Storage and Transportation (PHS&T)

You shall utilize reusable transit cases for all systems hardware, spares and ST&TE. You shall pack all hardware in shipping crates In Accordance With (IAW) best commercial practices.

3.4.7 Facilities Analysis

You shall identify the facilities required to maintain, operate, train, and test the system and identify any shortcomings/deficiencies between those facilities needed and those that are available at the fielding locations. Analysis shall include packaging, handling, storage and transportation requirements.

3.4.8 Inventories

Prior to shipping to the fielding site, you shall plan and conduct an inventory of the system equipment with a APM FMS Government representative.

You shall take necessary actions to facilitate transition of the components of the Serbia MILES Training System to Government. You shall coordinate transfer of the equipment to include 100 percent of spares, consumables, and repair parts. You shall inconjunction with the US Government, shall conduct a physical inventory of Delivered Equipment, Spares, Special Tools and Test Equipment (ST&TE), and consumables during the transition period. Upon completion of the inventory, representatives shall sign a hardcopy of the inventory to ensure all required items are delivered and a baseline established. You shall also ensure the following SOW CDRL requirements (if not previously provided) is surrendered to the Government or a Government designated representative.

- a. Training Materials
- b. Spares, Tools and Test Equipment, and Consumables
- c. Maintenance Data collected
- d. All other system related documentation/equipment required for/by the performance of this delivery order.

(DI-ILSS-81251 Equipment Inventory Report)

3.4.9 Warranty

You shall ensure the equipment for the Serbia MILES Training System has a 12 months defects/workmanship warranty after in-country final acceptance test of the MILES hardware IAW SOW paragraph 3.3.3 and also have an option for a second year. You shall ensure the repaired equipment for the standard life cycle support services already provided by contractor via the firm-fixed price contract.

3.4.10 Interim Contractor Logistics Support (ICLS)

You shall provide Interim Contractor Logistics Support (ICLS) in-country and outside country for unserviceable devices on a Time and Materials basis. The in-country ICLS shall consist of one (1) fully trained maintenance technicians traveling to Serbia for three (3) week visits, three (3) times per year, over a period of twelve (12) months after in-country system acceptance. During each trip in-country, repair and maintenance of the MILES hardware will be performed as well as training exercises support and remedially training. ICLS support will be requested 60 days prior to a visit and 30 days prior you shall provide a Course of Action (COA) brief to the Government to review.

You shall obtain direction and approval from the US Government prior to commencement of any ICLS trip. You shall repair as many damaged items as possible during each of the three (3) weeks visits using in-country available spares and repair parts that are deemed appropriate to carry by the maintenance technicians. You shall perform all maintenance tasks IAW the manuals and equipment documentation as updated under this contract and related contracts.

You shall meet a seven day turn-around time for in-country repair actions, except when required repair parts are not on hand in country; in the event that you must send items to your facilities in the United States for maintenance, you shall maintain a 15 day turn-around time for repair actions, except when required repair parts are not on-hand, beginning on the date the item is received at your facility in the United States and ending when the parts are shipped out of the facility. You shall be responsible for any and all shipping costs to and from the foreign country and shall maintain accountability for all hardware items turned in for repair/replacement both incountry and at your facility in the United States. You shall provide a report on all maintenance activities and ICLS actions accomplished under this contract, both for items maintained incountry and items sent to your facility in the United States.

(DI MISC 81392, Contractor Operation and Maintenance of Simulators/Equipment Management Status Report)

3.5 Technical Publications

3.5.1 Operator and Maintenance Manuals

You shall use existing operator and maintenance manuals for the equipment to be fielded as a baseline for this effort. You shall update the baseline manuals to reflect the FMS customer-specific systems/kit configurations as required. Such updates shall be inserted into the baseline manuals as appendices/work pages and submitted to the Government for verification and final approval. (DID-ADMN-80925, Revisions to Existing Government Documents)

You shall provide applicable COTS manuals with hardware, as required. (DI-TMSS-80527C, Commercial Off The Shelf (COTS) Manuals)

3.6 Training

3.6.1 New Equipment Training (NET) & In-Country Demonstration

You shall produce and provide system operation, maintenance, and New Equipment Training (NET) through a combination of classroom, written instructions, and hands-on operations. The NET shall be written and developed using the "train-the-trainer" concept.

A day-by-day training agenda and schedule of events, as well as training course support requirements (student and qualifications, classroom facilities, consumables, equipment, etc.) will be coordinated with the Government NLT 60 days prior to the start of the NET.

You shall provide instructors to conduct the operator's training course to include general operator's maintenance in Serbia for a period of one (1) week, for maximum of ten (10) students; there may be more participants for observation purposes. The NET shall cover all configurations of the hardware and systems being delivered under this contract. You shall use existing training materials and provide system operation and operator's maintenance familiarization training through a combination of classroom, written instructions, and hands-on operation. You shall provide the training materials as a complete and exportable training support package that integrates training products, materials, and other pertinent information necessary to train the system. (DI-ILSS-80872, Training Materials)

You shall assist in and support the planning and conduct of a demonstration of the MILES system/equipment by host country personnel, after successful completion of the NET. The purpose of this demonstration is to verify and ensure that the customer can operate the delivered system and hardware after completion of the NET.

3.6.2 Operator Training

You shall plan, prepare, conduct, and document the completion of Operator Training. You shall provide the students with detailed operation training of the MILES hardware/system delivered under this contract. You shall include setup, installation, operation of the MILES software, hardware description of the physical and functional aspects of the MILES hardware/system, equipment/system configurations, and related support hardware/systems delivered under this contract.

3.6.3 Maintenance Training

You shall plan, prepare, conduct, and document the completion of General Users Maintenance Training. This training will be a part of the Operators Training and will be intended for general users Preventive Maintenance Checks and Services (PMCS). You shall provide the students instructions to facilitate MILES hardware/system troubleshooting and maintenance, diagnostics and fault isolation, calibration, adjustments, component/piece part remove and replace

procedures, and use of built-in test (BIT) where applicable, using spare parts delivered under this contract.

3.6.4 Language

You shall provide all instruction, training materials, and system documentation in the English language. All MILES displays and voice commands/ messages shall be in the English language. You shall provide English text of warning, safety labels and decals for the Customer. to translate. After translation, you shall provide warning, safety labels and decals in the Serbian language.

3.6.5 Class Size

You shall schedule training to limit class sizes to ensure that each student receives the greatest benefit from the training. Class size shall not exceed ten (10) students.

3.6.6 Location of Training

You shall conduct the training courses at location(s) in Serbia, as identified by the Government.

3.6.7 Training and Equipment

You shall provide all required classroom and training materials for any and all courses. Training shall include both classroom and practical exercises, and shall total no more than eight hours per day.

3.6.8 Course Completion Criteria

Upon successful completion of the training, you shall provide each participant with a certificate recognizing satisfactory completion of the NET.

3.7 Compliance with Antiterrorism and Operations Security Regulations

You shall comply with Antiterrorism (AT) Awareness Training for Contractor Personnel Traveling Overseas per Army Regulation (AR) 525-13 and Antiterrorism /Force Protection for Defense Contractors outside the United States per Defense Federal Acquisition Regulations (DFARS) Clause 252.225-7043.